

Appl. No. 10/731,937
Atty. Docket No. CM1976C
Amdt. dated May 9, 2005
Reply to Office Action of 1/14/2005
Customer No. 27752

REMARKS/ARGUMENTS

Claims 1, 4, 5, 7 and 8 are in the application. Claim 4 has been amended, as required by the Examiner (below). It is submitted that all claims are fully supported, and entry is required.

Rejection Under 35 USC 112

It is submitted that the amendment of Claim 4 meets the rejection (Office Action page 2). Withdrawal of the rejection is requested.

Rejection Under 35 USC 103

Claims 1, 4, 5, 7 and 8 stand rejected over the "admitted prior art" in view of WO 93/08084 and U.S. 5,658,968, for reasons of record at pages 2-4 of the Office Action.

Applicants respectfully traverse all rejections on this basis.

With regard to the "admitted prior art," it is submitted that all that is "admitted" is that prior art processes involve printing directly onto the metallic layer. (See discussion of WO 93, below).

Applicants herein discovered that the printing ink could penetrate the metallic layer "through pin-holes which are usually present in the thin metallic layer" to "dissolve the embossed layer." See page 4, lines 7-11, of the specification.

It was the discovery of this penetration problem, and its solution, that resulted in the present invention.

As the Examiner is aware from case law cited at MPEP 2141.02, "[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified." This is part of the "subject matter as a whole" test under 35 USC 103.

Attention is first directed to the cited WO 93/08084 document, which, on its face, does relate to a Packaging Material With Holographic Pattern.

At page 3, lines 11-16, film 16 of metal is deposited and printing is applied over the film 16. [emphasis supplied]

Likewise, at page 3, lines 25-27, a sheet is "given an aluminum film 26," and "may then be printed over the film 26." [emphasis supplied]

Alternatively, at page 3, lines 30-32 a "separate material" 20a can have a priming coating 22a that is printed over, and then the "separate material" requires adhesive 23a for bonding to aluminum film 26. Or, (page 3, line 35) the printing may be applied to film 26 (the aluminum) before bonding takes place.

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In yet another embodiment of WO 93 (page 4, lines 6-8), aluminum film 36 is applied and the sheet material is then printed over the film 36. [emphasis added]

In still another embodiment (page 4, lines 13-17) an acrylic primer 42 to which an acrylic solvent-based thermoplastic layer is applied. Layer 44 is embossed and "then receives an aluminum film 46 . . . the material then may be printed . . ." [emphasis supplied]

In contrast to the foregoing wherein the printing is done, mainly, directly onto the aluminum layer, the process herein employs a primer layer that separates the ink layer from the metallic layer.

Unlike the "alternative" suggested at page 3, lines 30-32 of WO 93, the printing layer and the metallic layer herein are solely separated by the primer. In other words, there is no "separate material", nor any need for an adhesive to bond such separate material to the metallic layer, as in WO 93.

In short, it is submitted that WO 93 does not teach or suggest separation of the printing layer from the metallic layer by the sole means of the primer. Instead, WO 93 either prints directly onto the aluminum, or prints onto a separate material – in particular, a primer-coated "transparent polypropylene layer" as specifically disclosed in WO 93 at page 3, line 31.

Assuming that WO 93 accurately reflects the state of the art, it is submitted that it is in no way suggestive of the present process, as defined by the claims. Indeed, to lay-down a metallic layer and to print on said metallic layer without separating said metallic layer from the printing ink layer by means of the primer gives rise to the very problem discovered and solved by the present invention.

Attention is next directed to the cited U.S. '968 document.

At the outset, it is noted that nothing in this document appears to relate to the manufacture of holographic structures, as in the present invention. Thus, it is submitted that nothing in U.S. '968 evidences any appreciation of the problem discovered herein, nor is fairly suggestive of the solution arrived at by Applicants.

Rather, U.S. '968 is directed to the problem of printing on packaging material, which, assertedly, can result in the "blocking" problem (i.e., sticking or transfer of the image to the underside of the web) which is familiar in the package printing art.

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Patentees solve this "blocking" problem by means of "a unique formulation comprised of a polyamide resin," plus other stated ingredients. (See column 1, line 65 – column 2, line 2.) Such formulations are said to exhibit "increased water-borne primer compatibility," (column 2, line 4).

Table 1 (column 4 of U.S. '968) appears to show test results on "Commercial Polypropylene Films" (see column 4, line 39), and with water-borne primer (column 4, lines 58-63). The results in Tables 2 and 3, also appear to relate to printing on polypropylene film. But, nothing in any of the Examples appears to relate to printing on holographic structures, nor to the problems associated therewith.

Indeed, it is submitted that the above-cited passage at column 4, lines 58-63 of U.S. '968 could easily be read to teach that the ink penetrates the water-borne primer (i.e., does exhibit "receptability"). Of course, penetration so as to possibly impinge on the metallic layer and prospectively pass therethrough is precisely what Applicants herein seek to avoid.

In any event, it is clear that to speculate on the potential utility of U.S. '968 to solve the present problem with printing on holograms is an exercise in futility, since the patentees in U.S. '968 did not even recognize such problem, much less suggest a means to solve it.

Moreover, to suggest the combination of WO 93 and U.S. '968 to solve a problem not disclosed in either document constitutes impermissible hindsight. WO 93 teaches printing directly onto the metal layer (or, the alternate sheet). U.S. '968 teaches a "unique" ink formulation to solve the "blocking" problem, but does not relate to holographic material, nor suggests any printing problems associated therewith. Absent some suggestion that the two documents are related and are directed to the present problem, it is submitted that there is no reason to combine said documents, other than hindsight.

In this regard, attention is directed to *In re Shuman* 361 F. 2d 1008, 1012, 150 USPQ 54, 57 (CCPA, 1966), which states:

It is impermissible to first ascertain factually what appellants *did* and then view the prior art in such a manner as to select from the random facts of that art only those which may be modified and then utilized to reconstruct appellant's invention from such prior art.

As also noted in *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F. 2d 1572, 1577 & n. 14, 221 USPQ 929, 933 & n. 14 (F. Cir. 1984), when [as in the instant case] prior art